UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

Science and Ecosystem Support Division
980 College Station Road
Athens, Georgia 30605-2720

SITE: GE Rome
BREAK: 20.5
OTHER: V.406

September 18, 2003

4-SESD-EAB

MEMORANDUM

SUBJECT: Coosa River PCB Water Sampling Investigation Final Study Plan

FROM: Laura McGrath LM
Ecological Evaluation Section
Ecological Assessment Branch
Science and Ecosystem Support Division

TO: Jim Kutzman, Associate Division Director
Waste Management Division

THRU: Bill Cosgrove, Chief
Ecological Evaluation Section
Ecological Assessment Branch
Science and Ecosystem Support Division

Attached is the final study plan for the Coosa River PCB Water Sampling Investigation. The study will be conducted in two phases due to equipment limitations. The first phase will take place the week of 09/22/03. Samples will be collected from tributaries associated with the GE Plant that flow into the Coosa River. The second phase is tentatively planned for the week of 10/20/03. The exact date will be determined based upon field conditions and equipment availability. Samples will be collected from the Coosa River, Etowah River and the Oostanaula River during the second phase. If you have any questions, please contact me at (706) 355-8776.

Attachment

cc: Carol Monell, Waste Management Division
Carolyn Callihan, Waste Management Division
Wes Hardegree, Waste Management Division
Bill Bokey, Science and Ecosystem Support Division
Bill Cosgrove, Science and Ecosystem Support Division
Bobby Lewis, Science and Ecosystem Support Division
Michelle Burgess, Waste Management Division
Kay Wischkaemper, Waste Management Division
Jim Webster, Waste Management Division

cc: Bill Melville, Water Management Division
Wilda Cobb, Environmental Accountability Division
Nadine Orrell, Environmental Accountability Division

COOSA RIVER PCB WATER SAMPLING INVESTIGATION
QUALITY ASSURANCE PROJECT PLAN
SEPTEMBER 2003

U.S. EPA, Region 4
Science and Ecosystem Support Division
Ecological Assessment Branch
980 College Station Road
Athens, Georgia 30605

Prepared by:
Laura McGrath, Environmental Engineer

Laura McGrath 09/18/03
Project Leader Date

9/18/03
QAPP Reviewer Date

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Distribution List

Jim Kutzman	Waste Management Division
Carol Monell	South Site Management Branch, Waste Management Division
Carolyn Callihan	Waste Management Division
Bill Bokey	Ecological Assessment Branch, Science and Ecosystem Support Division
Bill Cosgrove	Ecological Assessment Branch, Science and Ecosystem Support Division
Bobby Lewis	Environmental Investigations Branch, Science and Ecosystem Support Division
Michelle Burgess	Office of Technical Services, Waste Management Division
Kay Wischkaemper	Office of Technical Services, Waste Management Division
Wes Hardegree	South Site Management Branch, Waste Management Division
Jim Webster	Emergency Response and Removal Branch, Waste Management Division
Bill Melville	Standards, Monitoring, and TMDL Section, Water Management Division
Wilda Cobb	Environmental Accountability Division
Nadine Orrell	Environmental Accountability Division

INTRODUCTION

At the request of the Region 4, Water Management Division (WMD) the Science and Ecosystem Support Division (SESD), Ecological Assessment Branch (EAB) conducted fish tissue and sediment sampling in the Coosa River system during November and December 2002 from Rome, Georgia to Lake Logan Martin near Pell City, Alabama. The resulting data was to be used in the derivation of a polychlorinated biphenyl (PCB) total maximum daily load (TMDL). The data from this sampling effort (Coosa River PCB TMDL Environmental Sampling Report, SESD, April 2003) revealed levels of PCBs in the fish tissue in excess of consumption guidelines set forth by the Georgia Environmental Protection Division (GA-EPD). There have been fish consumption advisories for the Coosa River from its headwaters to the Georgia/Alabama state line since 1976. The sediment sampling that was conducted as part of the same study did not show significant levels of PCBs. The pathway of PCB exposure for the fish has not been determined. The Region 4, Waste Management Division (WD), South Site Management Branch, has requested the collection of water samples from the Coosa River and three of its tributaries, Horseleg Creek and Little Dry Creek, and the South Branch of Little Dry Creek to determine if PCBs are present at trace levels in the water column and thus providing an exposure route for the fish. PCB contamination has been documented at and around the General Electric (GE) Plant in Rome, Georgia. The plant is located approximately 2 miles northwest of the Coosa River (Figure 1). The GE Plant is the most likely source of PCBs in that area.

BACKGROUND

GE opened the Rome, Georgia plant in 1952 and produced a variety of medium-capacity electrical transformers. The production of electrical transformers utilized materials such as mineral oil, silicone fluid or askarel dielectric fluid designs. Askarel dielectric fluids are used as insulating fluids for electrical transformers. Dielectric fluids are composed of a combination of various chlorinated benzenes and PCBs. The trade name for GE's askarel dielectric fluid was Pyranol. (Final Expanded Site Inspection Report, US-EPA, December 2001) PCBs were used in the manufacture of transformers from 1953 until April 1977.

Prior to 1968, GE discharged all stormwater from the facility directly into four unlined ditches that discharged into either Little Dry Creek or Horseleg Creek. In 1968, GE installed oil/water separators on three of the ditches to remove potential PCB contaminated oils from the stormwater. A National Pollutant Discharge Elimination System (NPDES)permit was issued to GE for the four stormwater outfalls in 1975. Figure 2 shows the approximate locations of the ditches and their discharge points into the creeks. Outfalls 001 and 003 were located on the southwest corner of the plant and drained to the south into Horseleg Creek which after three miles drains into the Coosa River. Outfall 002 was located to the north of the plant and discharged into Little Dry Creek, which flows into the Oostanaula River. Outfall 004 was located on the eastern side of the plant and discharged into the South Branch of Little Dry Creek, a tributary to Little Dry Creek. In 1990, Outfalls 001 and 003 were combined and routed to an on-site treatment facility. In 1994, Outfall 004 was also routed to the treatment facility. Since 1994, the treated water has been discharged through Outfall 003 into Horseleg Creek.

In 1969, the GE plant was connected to the City of Rome's sewer system. Sanitary flow, floor drains and hand-washing stations at the plant were connected to the sewer. As a result, PCB contaminated wastewater entered the sewer and was eventually discharged through the

City's wastewater treatment system into the Coosa River. As mentioned previously, GE ceased use of PCBs at the plant in 1977. GE removed contaminated sludge from the City of Rome digester in 1978-79. Since termination of operations at the plant in 1997, discharge to the sewer has been limited to sanitary flow and treated groundwater.

PROJECT DESCRIPTION

The data quality objectives for this project are presented in Appendix A. Six water samples will be collected during this investigation using an Infiltrex 300® trace organic sampler. The Infiltrex 300® is designed to remove particulate and dissolved fractions of organic constituents in-situ by passing a high volume of water through a glass fiber filter and a packed XAD resin column. This allows for reporting limits as low as a part per quadrillion. The particulate and dissolved fractions will be analyzed separately. The samples will be analyzed for 209 PCB congeners using EPA Method 1668a. Homologue results will also be reported. Aroclor values will be calculated from the congener results. An ampule of each sample will be archived with the laboratory for future dioxin analyses, if necessary. Figure 3 shows the approximate locations of the sample stations. Exact locations will be determined in the field. Table 1 contains a list of the sample stations and a description of their locations. Samples OR and ER will be considered control samples for comparison of downstream samples.

Table 1
Station Locations
Coosa River Water Sampling Investigation

Station	Location
LDC1	South Branch of Little Dry Creek below GE Outfall 004
LDC2	Little Dry Creek beyond confluence with South Branch of Little Dry Creek
OR	Oostanaula River upstream of confluence of Little Dry Creek
HLC1	Horseleg Creek below discharge of GE Outfalls 001 and 003
CR	Coosa River downstream of confluence with Horseleg Creek
ER	Etowah River upstream of confluence with Oostanaula River

Due to equipment limitations, the study will be conducted in two phases. Phase I will consist of sample collection in Horseleg Creek, South Branch of Little Dry Creek, and Little Dry Creek (HLC1, LDC1, and LDC2). Phase I sampling will be conducted during the week of 09/22/03. Phase II will consist of sample collection in the Coosa River, Oostanaula River, and the Etowah River. Phase II sampling will be conducted during the week of 10/20/03. Each phase of sampling will be conducted under similar conditions of flow and stage. Therefore, the actual dates may change due to field conditions.

Flow measurements will be obtained either through direct measurement or from United States Geological Survey gaging stations for each sampling location. In-situ measurements of temperature, pH, conductivity, dissolved oxygen, depth and turbidity will be conducted at 30 minute intervals throughout the sampling period. The measurements will be collected using a YSI 6920 multi-probe sonde. Each probe will be calibrated with a known standard prior to each deployment. Calibration will be checked at the end of each deployment.

A dedicated field notebook will be used to record all pertinent information during the study. Upon receipt of the data from the laboratory, a comprehensive report that includes the data and its interpretation will be distributed to the individuals who received copies of this study plan. The report will be completed within 90 days of receipt of the data.

TRAINING REQUIREMENTS

No special training requirements are needed for the activities planned during this project. All sampling stations are located in water bodies which can be accessed from either road crossings or public boat ramps. All personnel are certified in first aid and cardiopulmonary resuscitation (CPR).

SAFETY

A site specific safety plan is presented in Appendix C. The safety plan will be updated for phase II of the project (i.e., dates and personnel). Appendix D contains a float plan that will be used during phase II when samples are collected from the rivers. The float plan will be completed and approved after the exact date and personnel have been determined.

DOCUMENTATION AND RECORDS

All field notes will be recorded in a bound notebook and will include information outlined in the Ecological Assessment Standard Operating Procedures and Quality Assurance Manual, January 2002 (EASOPQAM). All documentation associated with this project will be stored in the official file.

SAMPLING METHODOLOGY

The Infiltrex 300® trace organic sampler is a high volume sampler capable of flow rates up to 2.25 liters per minute. Approximately 1000 liters of water are pumped through the apparatus during an extended period (generally eight hours). The sampler collects particulate material (> 1.0 µm) on glass fiber filters then extracts dissolved phase organic compounds onto XAD resin. The low flow is necessary to allow adequate time for any contaminants to adsorb to the resin. Appendix B contains specific procedures for collecting samples using the Infiltrex 300® sampler. The sampler can be used on water bodies which are accessible either by land or boat.

SAMPLE HANDLING AND CUSTODY REQUIREMENTS

All samples will be handled and custody maintained in accordance with Section 2 of the EASOPQAM.

ANALYTICAL METHODS REQUIREMENTS

All samples will be analyzed according to EPA Method 1668a and the Contract Laboratory Statement of Work.

QUALITY ASSURANCE/QUALITY CONTROL

While in the field, the following quality control samples will be collected:

1. Equipment rinse blank
2. Analyte-free water blank
3. Solvent blank.

DATA MANAGEMENT

Upon completion of the analyses, the laboratory will submit a complete data package as required by the contract laboratory statement of work for review by the SESD Office of Quality Assurance. Upon completion of the data package review, the data will be entered into the Region 4 Laboratory Information Management System. A hard copy of the data will be maintained in the official project file.

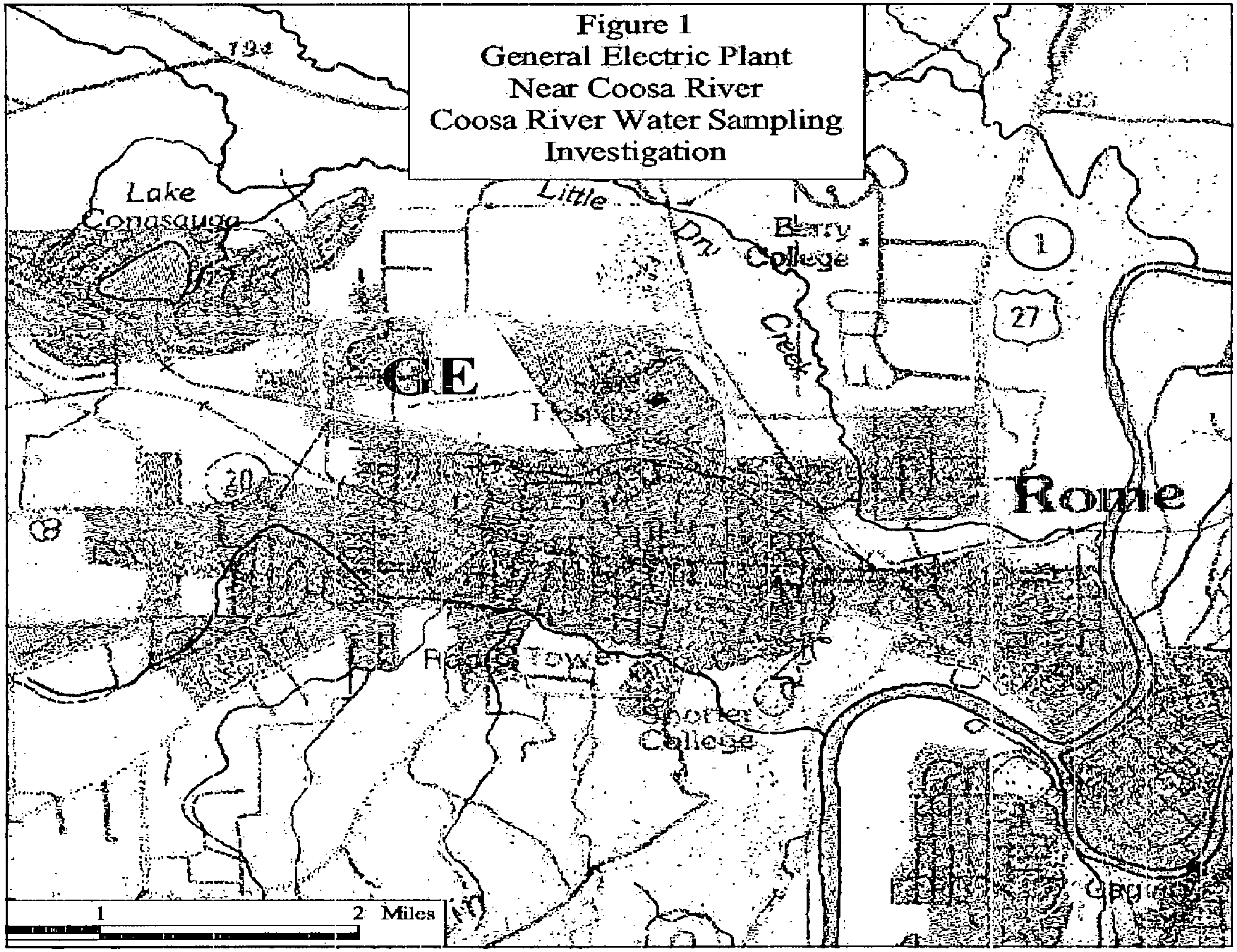


Figure 1
General Electric Plant
Near Coosa River
Coosa River Water Sampling
Investigation

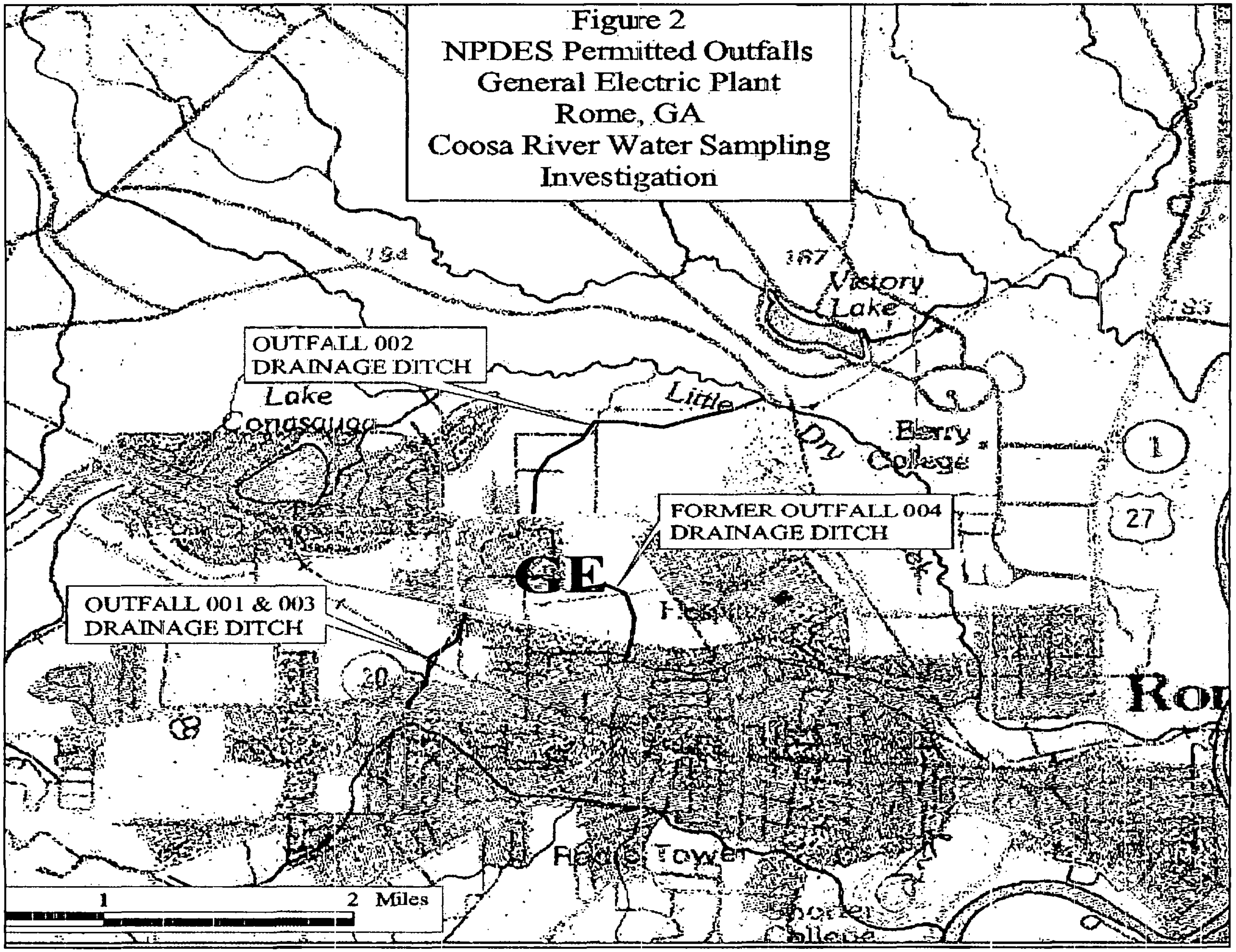


Figure 2
NPDES Permitted Outfalls
General Electric Plant
Rome, GA
Coosa River Water Sampling
Investigation

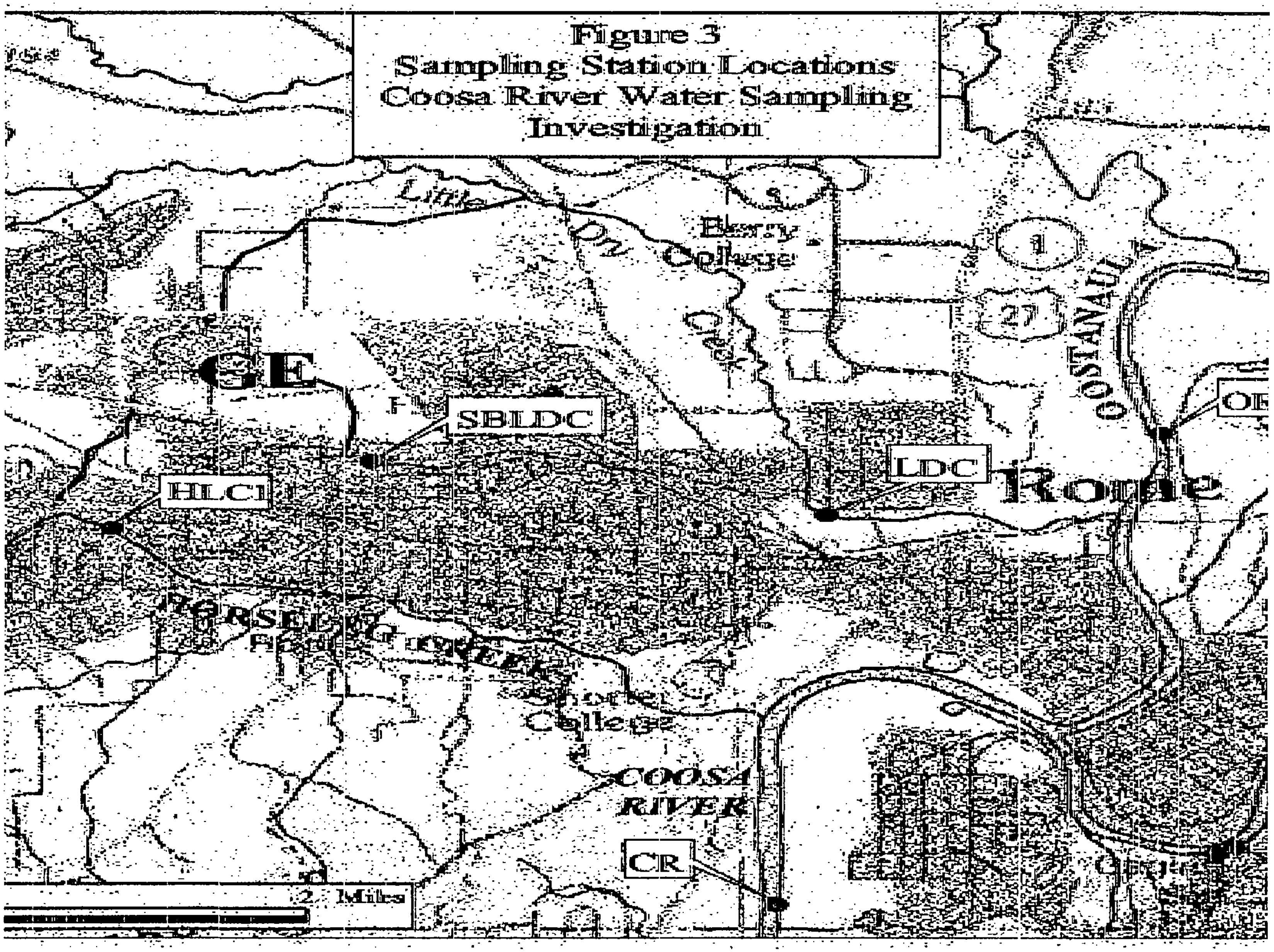


Figure 3
Sampling Station Locations
Coosa River Water Sampling Investigation

APPENDIX A
DATA QUALITY OBJECTIVES

STEP	DATA QUALITY OBJECTIVES		DESCRIPTION
1	State the Problem	• Identify members of the planning team • Identify the primary decision maker of the planning team and define each member's role and responsibility during the DQO phase • Develop a concise description of the problem • Specify the available resources and relevant deadlines for the study.	<u>Planning Team</u> Jim Kutzman, WD* Carol Monell, WD Carolyn Thompson, WD, Laura McGrath, SESD, Project Leader Bill Cosgrove, SESD Wes Hardigree, RPB, WD Jim Webster, ERRB, WD Kay Wischkaemper, OTS, WD Michelle Burgess, OTS, WD Wilda Cobb, EAD Nadine Orrell, EAD * = Primary decision maker <u>Description of Problem</u> Based on data from the Georgia Department of Natural Resources and studies conducted by SESD in 2002, fish in the Coosa River from Rome, Georgia to the Georgia/Alabama state line are contaminated with PCBs. The purpose of this project is to determine if PCB congeners are present in the water column in trace amounts thus presenting a potential exposure pathway for the fish. <u>Resources/Deadlines</u> Equipment, personnel, laboratory contract, and budget will be in place by 09/01/03. Proposed Deadlines: Draft Study Plan 08/01/03 Final Study Plan 08/18/03 Field Study-Phase I 09/15/03 Field Study-PhaseII 10/20/03 Draft Report 01/15/04 Final Report 02/15/04

STEP	DATA QUALITY OBJECTIVES		DESCRIPTION
2	Identify the Decision	• Identify the principal study question • Define the alternative actions that could result from resolution of the principal study question. • Combine the principal study question and the alternative actions into a decision statement. • Organize multiple decisions.	Principal Study Question Are PCB congeners present in trace concentrations in the water column in the Coosa River and selected tributaries in the area? Decision Statement If trace levels of PCB congeners are detected in the water column, further study will be needed to determine the source of the contaminants. If trace levels of PCBs are not present in the water column further study will be needed to determine the source of exposure for the fish.

STEP	DATA QUALITY OBJECTIVES		DESCRIPTION
3	Identify Inputs to the Decision	• Identify the information that will be required to resolve the decision statement. • Determine the sources for each item of information identified. • Identify the information that is needed to establish the action level. • Confirm that appropriate analytical methods exist to provide the necessary data.	<u>Information Required</u> PCB congeners, homologues, and calculated aroclor results from water samples collected with the Infiltrex 300® trace organic water sampler. <u>Sources</u> Water samples collected with the Infiltrex 300 from the Coosa River, Horseleg Creek, Little Dry Creek, Oostanaula River and the Etowah River. <u>Action Level</u> No specific action level is being targeted during this project. However, with the potential for reporting limits as low as the parts per quadrillion level, data should be useful for comparison to any action level. <u>Analytical Methods</u> EPA Method 1668a for analysis of PCB congeners using a high resolution mass spectrometer.

STEP	DATA QUALITY OBJECTIVES		DESCRIPTION
4	Define the Study Boundaries	• Specify the characteristics that define the population of interest. • Define the spatial boundary of the decision statement. • Define the temporal boundary of the problem. • Define the scale of decision making. • Identify practical constraints on data collection.	<u>Population of Interest</u> Concentration of trace levels of PCB congeners in the water column in the Coosa River, Horseleg Creek and Little Dry Creek and its tributary. <u>Spatial Boundary</u> Horseleg Creek from GE Outfalls 001 and 003 to the Coosa River, South Branch of Little Dry Creek from GE Outfall 004 to Little Dry Creek; Little Dry Creek from GE Outfall 002 to Oostanaula River; Oostanaula River upstream of Little Dry Creek; Etowah River upstream of confluence with Oostanaula River; Coosa River at Rome, Georgia. <u>Temporal Boundary</u> Project will take place the week of 09/15/03 if field conditions are acceptable (flow, etc.). <u>Scale of Decision Making</u> Data will be used to evaluate possible exposure to fish in the Coosa River including Horseleg Creek and Little Dry Creek and its tributary. <u>Practical Constraints</u> Adverse conditions encountered in the field such as high flow or excessive rainfall.
5	Develop a Decision Rule	• Specify the statistical parameter that characterizes the population (the parameter of interest). • Specify the action level for the study. • Develop a decision rule.	If PCB congeners are present in the water column, it is anticipated that additional data collection will be necessary to definitively identify the source.

STEP	DATA QUALITY OBJECTIVES		DESCRIPTION
6	Specify Tolerable Limits on Decision Errors	• Determine the possible range of the parameter of interest. • Identify the decision errors and choose the null hypothesis. • Specify a range of possible parameter values where the consequences of decision errors are relatively minor (gray region). • Assign probability limits to points above and below the gray region that reflect the tolerable probability for the occurrence of decision errors.	Not identified by the primary decision maker.
7	Optimize the Design for Obtaining Data	• Review the DQO outputs and existing environmental data. • Develop general data collection design alternatives. • Formulate the mathematical expressions needed to solve the design problems for each data collection design alternative. • Select the optimal sample size that satisfies the DQOs for each data collection design alternative. • Select the most resource-effective data collection design that satisfies all of the DQOs. • Document the operational details and theoretical assumptions of the selected design in the sampling and analysis plan.	Authoritative sampling approach is recommended based upon site knowledge, previous data collection and project objectives.

APPENDIX B
INFILTREX 300® SAMPLER
STANDARD OPERATING PROCEDURES

Infiltrex 300
Standard Operating Procedures
U.S. Environmental Protection Agency
Region 4
Science and Ecosystem Support Division
Athens, Georgia

INTRODUCTION

The Infiltrex 300 trace organic sampler is designed to remove particulate and dissolved fractions of organic constituents in-situ by passing a high volume of water through a glass fiber filter and a packed XAD resin column. The sampler utilizes a low flow rate (~2.2 liters/minute) to allow the maximum amount of time for contact between the sample water and the column resin within a reasonable length of time to collect the sample. The volume of sample passing through the unit varies based upon the analyses required. However, volumes typically are between 750 and 1000 liters. At a flow rate of 2.2 liters/minute, it takes approximately 6 to 8 hours to collect a sample. If feasible, a flow rate of 1.2 liters/minute is recommended. This results in approximately 14 hours to collect a sample.

EQUIPMENT

Following is a list of equipment needed when collecting a sample using the Infiltrex 300 trace organic sampler:

- Infiltrex 300 sampler
- Infiltrex tool kit
- Teflon intake line
- 3500 watt generator
- 100' extension cord
- Glass fiber filters
- XAD resin column (2 per station)
- Latex gloves
- Plastic bags
- Sample containers
- Aluminum foil
- Coolers
- Laboratory grade detergent
- Analyte-free water
- Laboratory grade Isopropanol
- Small scrub brush
- Safety glasses
- Hearing protection
- Stainless steel tongs
- Stainless steel forceps
- 5-gallon bucket (3)
- Stop watch
- Teflon squeeze bottle (2)
- Plastic roll.

PROCEDURES

Sampling

The sampling unit consists of an initial 440 µm stainless steel filter at the intake point which is attached to a teflon intake line. The intake line leads to two 140 µm stainless steel filters configured in parallel such that the sample is only run through one or the other. This allows for either exchange or cleaning of the filters without disrupting sample collection. After the sample passes through the 140 µm filter, it flows through the pump and then to a 1 µm glass fiber filter. There are two glass fiber filter housings configured similarly to the 140 µm filters. The sample passes through one or the other glass fiber filters and one filter can be replaced while the other is used for sampling without disrupting the sample collection process. The sample flows from the glass fiber filter to two XAD resin columns in series. The sample passes from the resin columns to the flow meter and is then discharged from the unit. The glass fiber filters are analyzed to determine the concentration of contaminants in the particulate phase. It is possible to retain the particulates from the 140 µm filters and analyze it with the glass fiber filters. The XAD resin columns are extracted and the extract is analyzed to determine the concentration of contaminants in the dissolved phase. The particulate and dissolved phases may be analyzed separately or combined into one sample.

The intake line is placed at ½ the depth of the water column in waters less than 14 feet deep and at 7 feet below the surface for waters greater than 14 feet deep (per personal correspondence with KMiller, USGS). For swiftly flowing waters, it may be necessary to attach the intake line to a weighted line to insure the intake remains stationary.

The following procedures should be followed when collecting a sample using the Infiltrex 300:

1. Install the 440 µm and 140 µm filters.

2. Place the intake line into the sample source. Turn the unit on and prime the pump using the primer valve on the unit and a squeeze bottle containing analyte-free water. Allow approximately 20 liters of sample water to pass through the unit before sample collection begins.

3. Remove the glass fiber filter housings. Empty all water from the filter housings. Insert the 1 µm glass fiber filters and reattach housings to unit.

4. Connect two XAD resin columns in series to the sampling unit. Uncap one connection at a time and connect to sampler before uncapping additional connections in order to reduce potential for airborne contamination. The caps from the columns should be stored in a contaminant-free container such as a 2 ounce glass jar and identified so that the same caps are used on each column after sampling is complete.

5. Record the totalizer reading. Check the control unit settings.

6. Begin sampling. Monitor unit at least hourly. Record the volume filtered, the

flow rate and the pressure. The flow rate should be maintained as close to the targeted rate as possible. Occasional adjustments to the pump speed may be necessary to maintain the desired flow rate. If frequent adjustments to the pump speed are required, clean or replace the 440 µm and 140 µm filters. If the pressure on the in-line gage reaches 20 psi and adjusting the pump speed does not increase the flow rate, the glass fiber filter should be changed. Change the 140 µm filter and check the 440 µm filter each time the glass fiber filter is changed.

7. After the required volume has been sampled, record stop time and the total volume filtered. Turn main switch off.

<u>Decontamination</u>

Decontamination Procedures for Stainless Steel Filters and Housings, Stainless Steel Forceps, Stainless Steel Tongs, Glass Fiber Filter Housing, and O-rings

1. Clean with liquinox and water.

2. Rinse with analyte-free water.

3. Rinse with laboratory grade isopropanol.

4. Rinse with analyte-free water.

Infiltrex 300 Sampling Unit Decontamination Procedures

1. Remove the 440 µm intake line filter, the intake line and the two 140 µm split line filters. Reinstall split line filter housings. Install the decon intake line.

2. Flush each side of the sampler with 1 gallon of analyte-free water to remove the remainder of the sample water from the unit.

3. Remove and decon the glass fiber filter housings and teflon o-rings. Re-install on sampling unit.

4. Disconnect tubing from flowmeter inlet. This becomes the sampler outlet line.

5. Insert the outlet line and the intake line into a gallon jug of liquinox solution (100 ml liquinox/1 gal analyte-free water). Recirculate the liquinox solution through each side of the sampler for four minutes.

6. Remove the outlet line from the gallon jar. Purge the liquinox solution from the sampler. Capture the liquinox solution for disposal.

7. Flush 1 gallon of analyte-free water through each side of the sampling unit.

Capture the analyte-free water for disposal.

8. Recirculate 1 gallon of isopropanol through each side of the sampling unit. Capture isopropanol for disposal.

9. Flush 2 gallons of analyte-free water through each side of the sampling unit. Replace all tubin on sampler unit with clean tubing. Seal all openings to the unit.

APPENDIX C
SAFETY PLAN

SAFETY PLAN	
Site Name: **Coosa River PCB Water Sampling Investigation**	Contact:
Address: **Rome, GA**	
Phone Number: **N/A**	
Purpose of Visit: **Collect water samples from Horseleg Creek andLittle Dry Creek**	
Proposed Date of Work: 09/22/03 - 09/26/03	
Directions to Site: **See attached maps.**	

SITE INVESTIGATION TEAM:

PERSONNEL *	SAFETY CATEGORY	RESPONSIBILITIES
Laura McGrath	**D**	**Project Leader**
Tim Simpson	**D**	**Sampler**
Joe Compton	**D**	**Sampler**
Jerry Ackerman	**D**	**Sampler (ESAT)**

* All employees have been trained/medically monitored in accordance with OSHA 29 CFR 1910.120 requirements and US-EPA Region 4 Field Health and Safety Manual, 1990 edition.

PLAN PREPARATION:

Prepared by:	Laura McGrath	Date 09/17/03
Reviewed/Approved by:	Phyllis Meyer	Date 9/18/03
Section Chief:	Bill Cosgrove	Date 9/18/03

EMERGENCY INFORMATION:

Local Resources:

Ambulance (Name):	Phone: **911**

Hospital (Name): Floyd Medical Center	Phone: **911**
Police (Local or State):	Phone: **911**
Fire Department:	Phone: **911**

Office Resources:

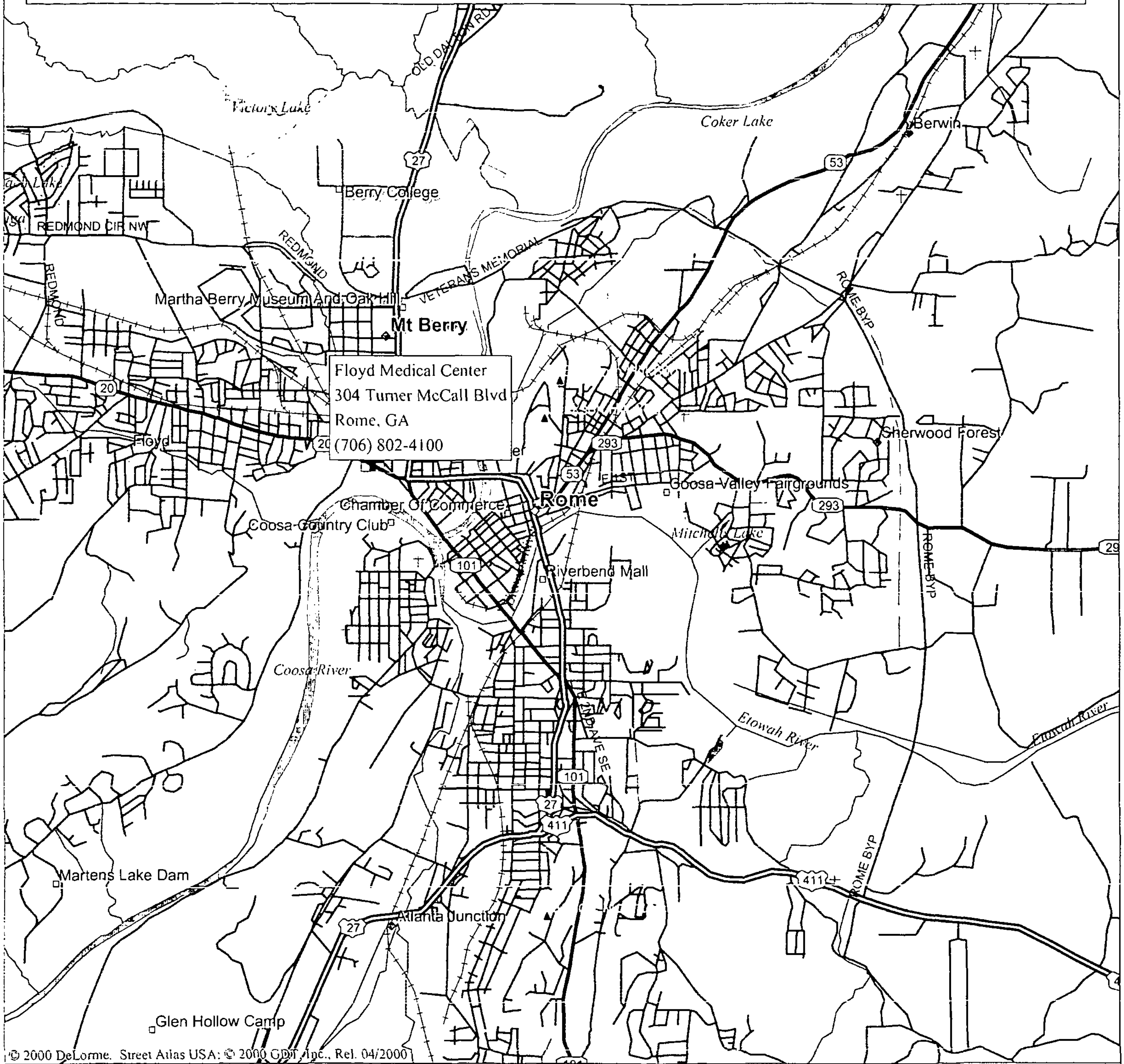
OFFICE/POINT of CONTACT	WORK PHONE	HOME PHONE
EAB Office - Linda Watson	(706) 355-8701	
EPA - Emergency Response - Atlanta	(404) 562-8700	
SHEM - Betty Kinney	(706) 355-8511	
EAB Safety Officer - Phyllis Meyer	(706) 355-8709	
Chief, EAB - Bill Bokey	(706) 355-8604	(706) 549-2611
Chief, EES - Bill Cosgrove	(706) 355-8616	(706)

EMERGENCY CONTACTS:

Poison Control Center	Phone: (800) 282-5846
National Environmental Response Ctr	Phone: (800) 424-8802

Directions to Hospital (Attach Map if Available): Floyd Medical Center
304 Turner McCall Boulevard, Rome, GA (706) 802-4100 See Map for directions.

Floyd Medical Center - Rome, Georgia



Mag 13.00
Wed Sep 17 11:15 2003
Scale 1:62,500 (at center)

1 Miles

2 KM

Local Road		Small Town		Water	
Major Connector		Large City		State Park/Forest	
State Route		Summit		Woodland	
Trail		Hospital		River/Canal	
US Highway		Locale		Intermittent River	
Utility/Pipe		Cemetery			
Railroad		Population Center			
Point of Interest		Land			

APPENDIX D
FLOAT PLAN

FLOAT PLAN

Complete this plan, before going boating and leave it with a reliable person who can be depended upon to notify the Coast Guard, or other rescue organization, should you not return as scheduled. Do not file this plan with the Coast Guard.

PROJECT DATES: **October 20-25, 2003**
If overnight, date returning: **N/A**

1. NAME OF PERSON REPORTING: **Laura McGrath**

TELEPHONE NUMBER: **Office (706) 355-8776**

BOAT MAKE	COLOR	LENGTH	ENGINES	OCCUPANTS
Pontoon	silver	28'	150 hp	
Jon	green	12'	6 hp, 4 stroke	

4. TRIP EXPECTATIONS

LEAVE AT: **0630 hours**

EXPECTED TO RETURN BY: **1900 hours**

AND IN NO EVENT RETURN LATER THAN: **2200 hours**

5. IF NOT RETURNED BY: **2200 hours**

TELEPHONE Laura McGrath at cell phone (706) 338-
Or motel phone

6. SURVIVAL EQUIPMENT: (CHECK AS APPROPRIATE)
_**X**___PFDs___FLARES_____MIRROR_____SMOKE SIGNALS
_____CLOTHING__**X**___FLASHLIGHT_____FOOD__**X**___PADDLES
_____WATER_____OTHERS___**X**__ANCHOR_____RAFT OR DINGHY
_____EPIRB

7. CELL PHONE: (706) 338-

9. FOR SINGLE BOAT OPERATION: AUTOMOBILE LICENSE